

**6BQ5****POWER PENTODE**

9-PIN MINIATURE TYPE

6BQ5**GENERAL DATA****Electrical:**

Heater, for Unipotential Cathode:

Voltage 6.3 ac or dc volts

Current 0.76 amp

Direct Interelectrode Capacitances:^oGrid No.1 to plate. 0.5 max. μ fGrid No.1 to cathode & grid No.3,
grid No.2, and heater 10.8 μ fPlate to cathode & grid No.3,
grid No.2, and heater 6.5 μ f**Characteristics, Class A₁ Amplifier:**

Plate Voltage 250 volts

Grid-No.2 (Screen-grid) Voltage 250 volts

Grid-No.1 (Control-grid) Voltage. -7.3 volts

Plate Resistance (Approx.) 38000 ohms

Transconductance. 11300 μ hos

Plate Current 48 ma

Grid-No.2 Current 5.5 ma

Mechanical:

Operating Position. Any

Maximum Overall Length. 3-1/16"

Maximum Seated Length 2-13/16"

Length, Base Seat to Bulb Top (Excluding tip). 2-7/16" \pm 3/32"

Diameter. 0.750" to 0.875"

Dimensional Outline See General Section

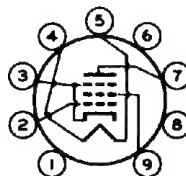
Bulb. T6-1/2

Base. Small-Button Noval 9-Pin (JEDEC No.E9-1)

Basing Designation for BOTTOM VIEW. 9CV

Pin 1 - Internal Con-
nection—
Do Not Use

Pin 2 - Grid No.1

Pin 3 - Cathode,
Grid No.3

Pin 4 - Heater

Pin 5 - Heater

Pin 6 - Same as Pin 1

Pin 7 - Plate

Pin 8 - Same as Pin 1

Pin 9 - Grid No.2

AMPLIFIER — Class A₁**Maximum Ratings, Design-Center Values:**

PLATE VOLTAGE 300 max. volts

GRID-No.2 (SCREEN-GRID) VOLTAGE 300 max. volts

GRID-No.1 (CONTROL-GRID) VOLTAGE:

Positive-bias value 0 max. volts

CATHODE CURRENT 65 max. ma

PLATE DISSIPATION 12 max. watts

GRID-No.2 INPUT[•] 2 max. watts

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POWER PENTODE

PEAK HEATER-CATHODE VOLTAGE:

| | | | |
|--|------------------|------|-------|
| Heater negative with respect to cathode. | 100 | max. | volts |
| Heater positive with respect to cathode. | 100 [▲] | max. | volts |

Typical Operation:

| | | |
|--|------|-------|
| Plate Voltage. | 250 | volts |
| Grid-No.2 Voltage. | 250 | volts |
| Grid-No.1 Voltage. | -7.3 | volts |
| Peak AF Grid-No.1 Voltage. | 6.2 | volts |
| Zero-Signal Plate Current. | 48 | ma |
| Max.-Signal Plate Current. | 50.6 | ma |
| Zero-Signal Grid-No.2 Current. | 5.5 | ma |
| Max.-Signal Grid-No.2 Current. | 10 | ma |
| Effective Load Resistance. | 4500 | ohms |
| Total Harmonic Distortion. | 10 | % |
| Max.-Signal Power Output | 5.7 | watts |

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:

| | | |
|--------------------------------------|-----|-------------|
| For fixed-bias operation | 0.3 | max. megohm |
| For cathode-bias operation | 1 | max. megohm |

○ Without external shield.

● Grid-No.2 input must not exceed 4 watts under maximum-signal conditions.

▲ The dc component must not exceed 100 volts.

OPERATING CONSIDERATIONS

The *bulb* becomes hot during operation. To insure adequate cooling, therefore, it is essential that free circulation of air be provided.



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AVERAGE CHARACTERISTICS

$E_f = 6.3$ VOLTS
GRID-N#2 VOLTS = 250

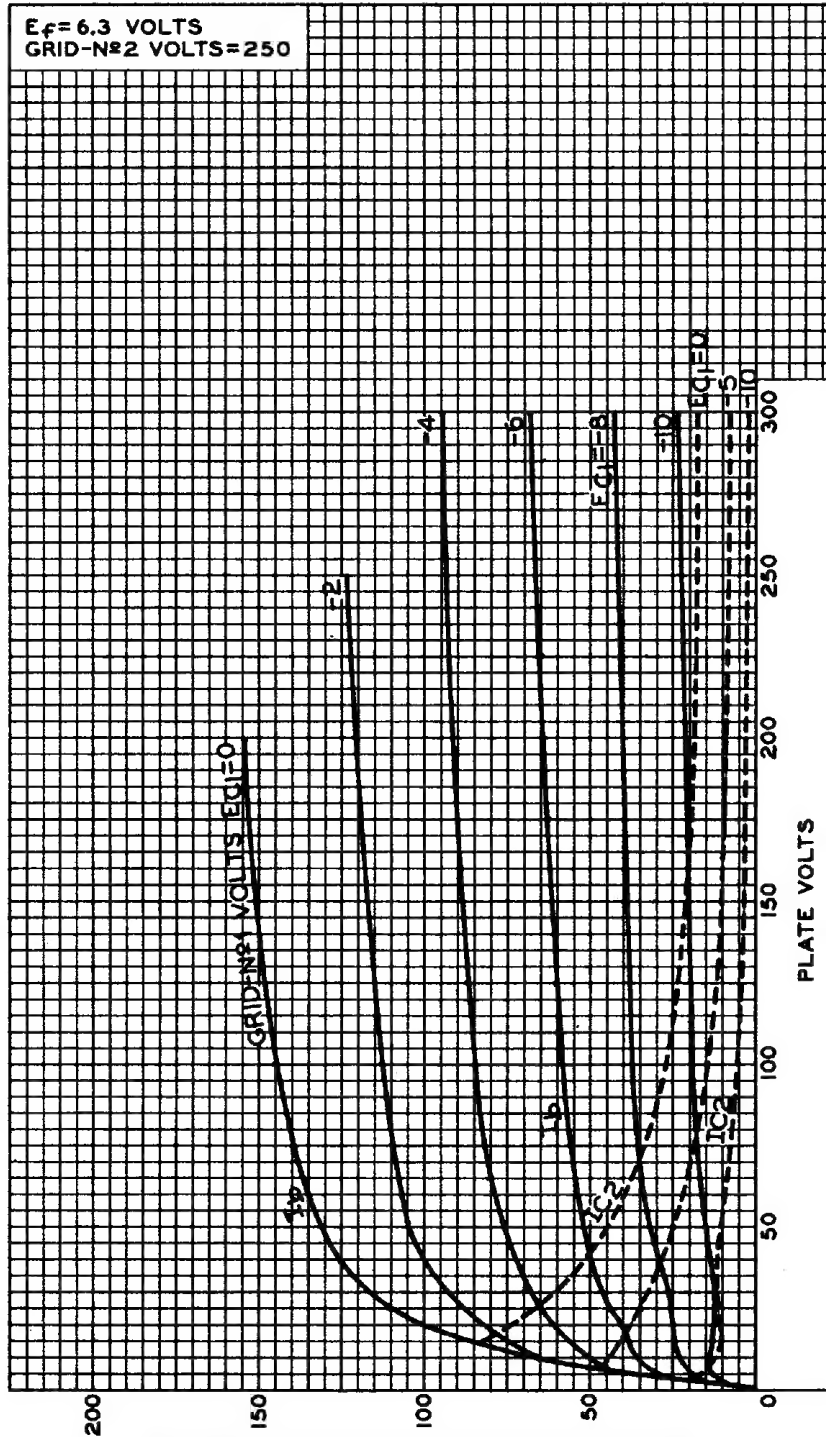


PLATE (I_b) OR GRID-N#2 (I_{C2}) MILLIAMPERES

ELECTRON TUBE DIVISION

92CM-9903

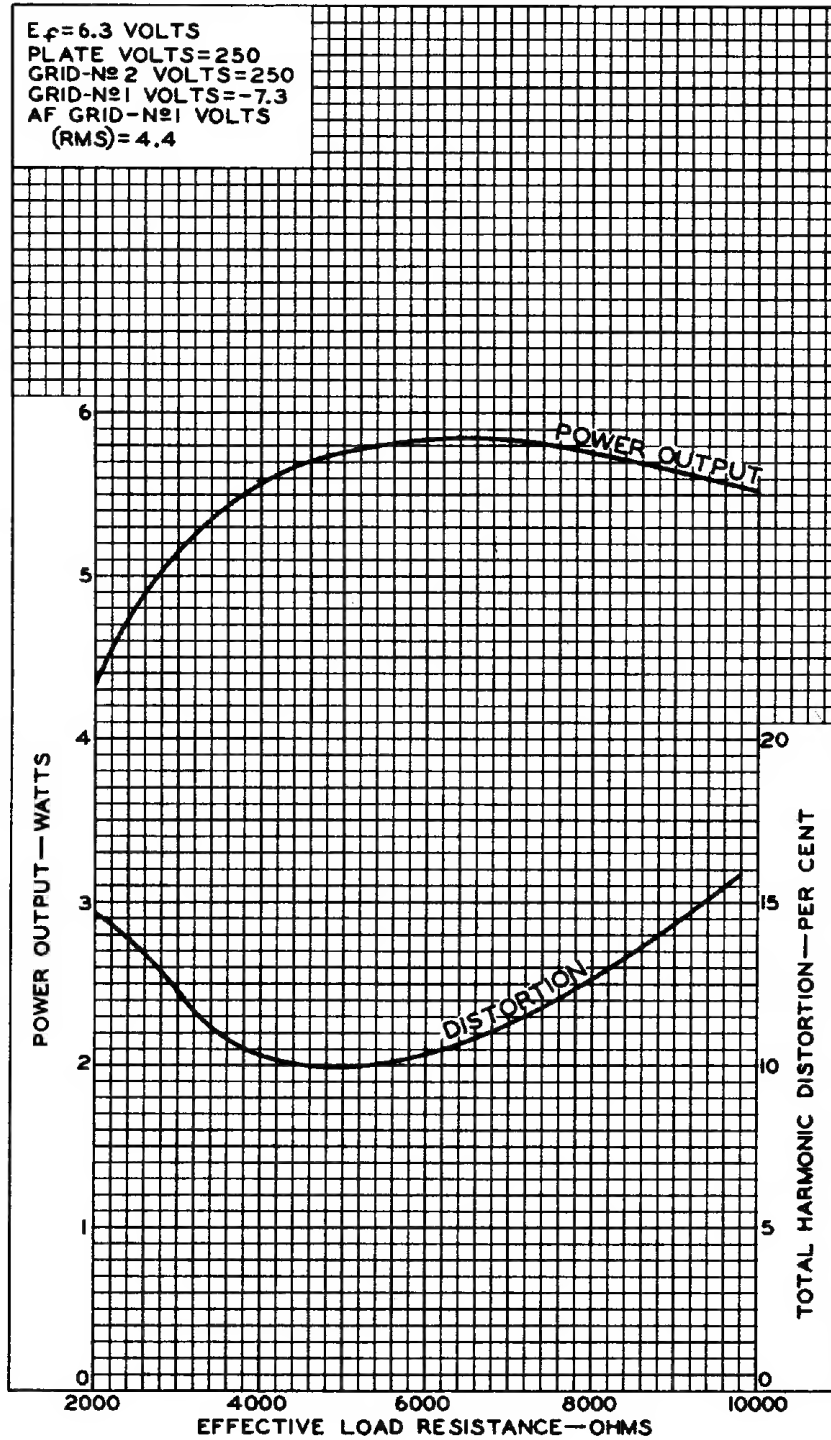
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OPERATION CHARACTERISTICS



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